REMARKS

The Examiner has rejected claims 1–9, 12–31, and 34–73. The Examiner has objected to claims 10, 11, 32, 33, and 46. Applicants are canceling claims 7–9, 11–15, 29–32, and 34–37 without prejudice or disclaimer. Claims 1, 10, 23–28, 33, 38–45, 57, and 62–68 have been amended to further recite the features of the invention. Claims 74–93 have been added to further recite the invention. As a result, claims 1–6, 10, 16–28, 33, and 38–93 are pending for examination with claims 1, 23, 45, 57, 62, 68, 74, and 88 being independent claims. The amendments made and the new claims added find support in the specification and do not constitute new matter.

Claim Objections:

The Examiner has objected to claim 46 because of informalities noted in the OA. Applicants have **amended claim 46** such that the noted informalities have been corrected.

Allowable Subject Matter:

The Examiner has objected to **claims 10, 11, 32, and 33,** but considers the claims allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

Applicants have amended independent claims 1, 45, 57, and 68 to incorporate the limitations of allowable claims 10 and 32, and ask that independent claims 1, 45, 57, and 68 be formally allowed.

Specifically, Applicants have rewritten independent claims 1, 45, 57, and 68 to include the limitations of allowable claims 10 and 32, the amended claims calling for:

"...wherein the nonlinear invariance transformation models a change in lighting angle in an individual training pattern." (underlining added for emphasis)

Accordingly, Applicants submit that claims 1, 45, 57, and 68 are allowable. Each of claims 2-6, 10, 16-22, 46-56, 58-61, 69-73, and new claim 86 is dependent on claim 1, 45, 57, or 68. As such, each of dependent claims 2-6, 10, 16-22, 46-56, 58-61, 69-73, and new claim 86, is believed allowable, at least in part, based upon claim 1, 45, 57, or 68.

Further, Applicants have amended independent claims 23 and 62 to incorporate the limitations of claims 11 and 33, and ask that independent claims 23 and 62 be formally allowed.

Specifically, Applicants have rewritten independent claims 23 and 62 to include the limitations of allowable claims 11 and 33, the amended claims calling for:

"...wherein the nonlinear invariance transformation models a change in brightness in an individual training pattern." (underlining added for emphasis)

Accordingly, Applicants submit that claims 23 and 62 are allowable. Each of claims 24-28, 33, 38-44, 63-67, and new claim 87 is dependent on claim 23 or 62. As

such, each of dependent claims 24–28, 33, 38–44, 63–67, and new claim 87, is believed allowable, at least in part, based upon claim 23 or 62.

New Claims:

New claims 74–85 have been added that are similar to claims 45–56 but that incorporate the limitations of allowable claims 11 and 33. Accordingly, Applicants ask that new claims 74–85 be allowed.

New claims 88–93 have been added that are similar to claims 68–73 but that incorporate the limitations of allowable claims 11 and 33. Accordingly, Applicants ask that new claims 88–93 be allowed.

Claims Rejections—35 U.S.C. §102:

The Examiner has rejected claims 1-9, 12-13, 16-20, 22-31, 34-35, 38-42, 44-54, and 56-73 under 35 U.S.C. §102(b) as being anticipated by Simard et al (Transformation Invariance Pattern Recognition—Tangent Distance and Tangent Propagation) ("Simard"). Applicants traverse the Examiner's rejection but have none-the-less amended claims to further clarify the invention.

Applicants have amended **independent claims 1, 45, 57, and** 68 to include the limitations of allowable claims 10 and 32, the amended claims calling for:

"...wherein the nonlinear invariance transformation models a change in lighting angle in an individual training pattern." (underlining added for emphasis)

As stated by the Examiner in the OA, "...the prior art of record taken alone or in combination fails to teach the nonlinear invariance transformation modeling a change in lighting angle from claims 10 and 32...".

Accordingly, Applicants submit that independent claims 1, 45, 57, and 68 as amended with the limitations of allowable claims 10 and 32 are not anticipated by Simard under 35 U.S.C. §102(b). As such, Applicants respectfully request that the Examiner withdraw the rejection.

Each of claims 2-6, 10, 16-22, 46-56, 58-61, 69-73, and new claim 86 is dependent on claim 1, 45, 57, or 68. As such, each of dependent claims 2-6, 10, 16-22, 46-56, 58-61, 69-73, and new claim 86, is believed allowable, at least in part, based upon claim 1, 45, 57, or 68.

Further, Applicants have amended **independent claims 23 and 62** to include the limitations of allowable claims 11 and 33, the amended claims calling for:

"...wherein the nonlinear invariance transformation models a change in brightness in an individual training pattern." (underlining added for emphasis)

As stated by the Examiner in the OA, "...the prior art of record taken alone or in combination fails to teach the nonlinear invariance transformation... modeling a change in brightness from claims 11 and 33."

Accordingly, Applicants submit that independent claims 23 and 62 as amended with the limitations of allowable claims 11 and 33 are not anticipated by Simard under 35 U.S.C. §102(b). As such, Applicants respectfully request that the Examiner withdraw the rejection.

Each of claims 24–28, 33, 38–44, 63–67, and new claim 87 is dependent on claim 23 or 62. As such, each of dependent claims 24–28, 33, 38–44, 63–67, and new claim 87, is believed allowable, at least in part, based upon claim 23 or 62.

Claims Rejections—35 U.S.C. §103:

The Examiner has rejected claims 14–15 and 36–37 under 35 U.S.C. §103(a) as being unpatentable over Simard in view of Williams et al. (US Patent No. 6,178,261) ("Williams"). Applicants traverse the Examiner's rejection but have none-the-less canceled claims 14–15 and 36–37 without prejudice or disclaimer in an effort to further prosecution.

Accordingly, reconsideration and examination of the above-referenced application is requested.

CONCLUSION

Accordingly, in view of the above amendment and remarks it is submitted that the claims are patentably distinct over the prior art and that all the rejections to the claims have been overcome. Reconsideration and reexamination of the above application is requested. Based on the foregoing, Applicants respectfully request that the pending claims be allowed, and that a timely Notice of Allowance be issued in this case. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' representative at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check please charge any deficiency to Deposit Account No. 50–0463.

Respectfully submitted,

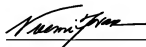Microsoft Corporation

Date: <u>October 11, 2006</u>

By: _____

L. Alan Collins, Reg. No.: 57,646
Direct telephone (425) 703–8265
Microsoft Corporation
One Microsoft Way
Redmond WA 98052–6399

CERTIFICATE OF MAILING OR TRANSMISSION
(Under 37 CFR § 1.8(a)) or ELECTRONIC FILING

I hereby certify that this correspondence is being electronically deposited with the USPTO via EFS–Web on the date shown below:

<u>October 11, 2006</u>
Date

Noemi Tovar

Microsoft Corporation
Type of Response: Amendment
Application Number: 10/697,727
Attorney Docket Number: 306017.01

Fees Due

	REMAINING AFTER AMENDMENT	HIGHEST PAID FOR	EXTRA	SMALL ENTITY		NOT SMALL ENTITY	
				RATE	FEE	RATE	FEE
TOTAL CLAIMS	77	73 (20 MINIMUM)	4	$25 EACH	$	$50 EACH	$200.00
INDEP. CLAIMS	8	6 (3 MINIMUM)	2	$100 EACH	$	$200 EACH	$400.00
FIRST PRESENTATION OF MULTIPLE DEPENDENT				$180	$	$360	$0
☐ ONE MONTH EXTENSION OF TIME				$60	$	$120	$0
☐ TWO MONTH EXTENSION OF TIME				$225	$	$450	$0
☐ THREE MONTH EXTENSION OF TIME				$510	$	$1020	$0
☐ FOUR MONTH EXTENSION OF TIME				$795	$	$1590	$0
☐ FIVE MONTH EXTENSION OF TIME				$1080	$	$2160	$0
☐ LESS ANY EXTENSION FEE ALREADY PAID				minus	($)	minus	($0)
☐ TERMINAL DISCLAIMER				$65	$	$130	$0
☐ OTHER FEE OR SURCHARGE AS FOLLOWS:							$ 0
TOTAL FEE DUE					$		$600.00